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Rubeola

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An Inaugural Dissertation on Rubeola

by

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of

Pennsylvania

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"Non recito cuiquam, nisi amicis, idque coactus" Hor.

Rubeola or Measles, has been designated by a great variety of names, such as Morbilli, the Minor Plague, Roseola, &c; names which were also given to Scarlatina, & to other eruptions with which it was frequently confounded, before the appearance of the "Nouvelles Classes des Maladies", by Sauvages; since which time the term Rubeola has been very generally adopted in its present signification.

Rubeola is said, first to have appeared in Europe about the year 622 A.D. i.e. about the same period as the Small Pox, of which it was by many practitioners considered as only a variety, while others confounded it with Scarlatina.

Near the close of the 17th century Measles was so correctly described by Sydenham, that accurate observer of Nature, that little was left to the graphic talents of his successors; & indeed but little has been added to what we find in his writings on this subject.

By nosologists several species of this disease have been mentioned. Willan speaks of Rubeola vulgaris, R. sine Catarrho, & R. nigra; but may not the two

last be considered as mere modifications of the first, depending on some of those circumstances by which nearly all diseases are more or less influenced, as peculiarity of constitution, state of the atmosphere, &c?

Rubeola has been described, "an inflammatory infectious fever attended with cough, sneezing, a defluxion of thin humours from the eyes & nose, and a determination of acrid matter to the surface of the body, showing itself in red spots over every part of it, which never come to any suppuration, but go away in a small mealy desquamation of the cuticle after a few days continuance". This description may be improved by the addition of Dr. Willan's valuable diagnostic mark—the patches of inflammation being crescentic or semicircular, & the intervening cuticle of its usual appearance.

Measles is generally considered to be contagious, & many respectable members of the profession have supported this opinion. By Dr Home we are told, that he succeeded in inoculating twelve persons, by applying to incisions made in their arms, cotton dipped in blood

obtained from persons affected with Measles; that six days after inoculation, the disease was induced in a very mild form, the lungs not being affected, as is so common in this disease. Experiments of this kind would go far to settle the question: they have been repeated by other practitioners, but without the results so confidently stated by Dr Home. By Professor Chapman we are informed, that in 1801, at the Dispensary in this City, repeated trials were made with the blood, the tears, the mucus of the nostrils & bronchia, &c. without succeeding in any one instance.

It is certainly a singular fact, that some of the Exanthemata occur only once in the course of life, so that one attack seems to shield the individual from the utmost malignity of infection. Though Measles, as well as Small Pox, is said to have occurred twice in the same person, it happens too rarely to affect the general rule. We are told by Heberden, that some individuals who cannot be made to take some of the Eruptive diseases at one age, are yet liable to them

at another. The number of such individuals is probably small. Most persons having Measles in early life, & thus obtaining the immunity, it is by no means surprising that this disease should be comparatively rare among adults. According to Dr M'illan, when no catarrh-al symptoms occur, the susceptibility is not destroyed; & in this case when the efflorescence diminishes, it is not uncommon for a second eruption to occur, accompanied with considerable constitutional disorder.

Measles prevails most commonly during the winter & Spring, but may be epidemic at any season. The generally received opinion is, that it occurs as an epidemic every 7 years: in this City, as we are informed by Professor Chapman, its returns since the year 1772, have been perennial, & by no means restricted to the human race — the brute creation suffering at times greatly from it. It is much aggravated by extremes of heat & cold. We are told that Measles & Small Pox occurring together, the latter is delayed until the former has run its course. Dr Potter says, that

Rubeola will often cure Pertussis & Intermittents, & remove the predisposition to Chronic Rheumatism & Croup.

Like all other febrile diseases, Rubeola commences with languor, chilliness, oppression, drowsiness amounting in some instances almost to coma, heat, thirst, anxiety, pains in the head, back & loins, sometimes spasms, redness of the face & eyes, copious secretion of tears, swelling of the eyelids, sometimes nausea & even vomiting of bilious matter; to these symptoms may be added, a dry cough, hoarseness, soreness of the throat, hurried respiration, hot dry skin, dyspnoea, pulse frequent & hard, a discharge of an acrid fluid from the nostrils, accompanied with frequent sneezing.

The eruption usually appears about the 4th day, tho occasionally not until the 7th 8th 10th or even later, first like flea-bites on the forehead & chin, gradually progressing over the whole face, & in a day or two covering the whole body. The spots are at first of a rivid hue, which becomes darker as they increase

in size, until they coalesce into irregular crescentic patches, interspersed with single round dots. The efflorescence on the face is slightly elevated, as may be perceived by the finger. Dr Hazeltine of Berwick (Maine) observed an eruption on the gums & fauces, three days before the efflorescence of Measles.

The Disease with which Rubeola is apt to be confounded, is Scarlatina; & in some cases the diagnosis is by no means easy. We may be aided by attending to the following differences; the redness of Scarlatina is more diffused, not in crescentic patches, not elevated; the eruption in Scarlatina commonly appears on the 2nd day, & in Rubeola not before the 3rd; the catarrhal symptoms are milder in Scarlatina; we may also be assisted by the nature of the prevailing epidemic.

Our prognosis may be favourable, when the symptoms are mild, the expectoration loose & copious, the eruption bright & distinct, some degree of moisture on the surface, the bowels gently open, &c; but

when the eruption is imperfectly thrown out, the head much affected with delirium, when the breathing is difficult & laborious, cough dry, skin parched, pulse hard, or when the vomiting continues even after the eruption has appeared, the efflorescence being livid, &c, we have great reason to dread the event.

Measles is apt to leave behind it some very distressing affections, as ophthalmia, inflammation of the lungs, which, in scrofulous constitutions, frequently ends in hectic fever or confirmed Phthisis; irritation of the intestines producing diarrhœa, or enlargement of the mesenteric glands occasioning marasmus, Dropsy, &c.

The proximate cause of Rubeola seems to be inflammation of the mucous membranes, chiefly of the primæ viæ, affecting the head & skin by sympathy. That Measles depends on inflammation, is shown by the symptoms, & also by dissection; besides the gastro-enteritis, the lungs, bronchia & trachea are also phlogosed, & sometimes nearly filled

with inspissated mucus.

When the mucous tissue is so much affected that the metastasis to the skin cannot take place, the danger is imminent: to denote this state of the disease, the terms Rubeola nigra, & Putrid measles have been used.

Measles when occurring in a mild form requires but little medical treatment; the chief objects of attention being, to avoid exposure to cold, by confining the patient to the house, & regulating the temperature of his chamber to the degree most comfortable to himself, which will generally be about 65° F.; the occasional administration of a gentle laxative, as senna & manna or one of the neutral salts, to keep the bowels in a soluble state; avoiding every article of food or drink of a stimulating nature, & living on mild farinaceous articles, as Barley, sago, Tapioca, Arrow-root, & the like, & drinking cool water, lemonade, &c. But when the disease is more decidedly inflammatory, the above

treatment will not be sufficient to carry the pa-
-tient through the attack. This more aggravated
state of the disease is known by the determination
to the head inducing delirium & coma, by the
difficulty of breathing, continual excitement to
cough, full hard pulse, &c. In this case, the
utility of phlebotomy is generally admitted; but
the extent to which the lancet should be carried,
is not agreed among practitioners, especially in
children. By some it is said, that children do
not bear V. S. well, & that it should be used with
great caution; but we have the authority of some
of our most valued physicians in support of as
free V. S. in this affection as in any other phleg-
-masia. Our eloquent Professor of the practice
assures us, that Children bear depletion of every
kind better than adults, & that Measles is the
most inflammatory of the Exanthemata; Why
then should we hesitate to employ freely those means,
in the case of infants, which we know best adapt

ed to combat inflammations? If the head be much affected, Cups or leeches to the temples will be useful; if much oppression of the chest or difficulty of breathing, topical bleeding from the breast or back, after which a blister to the breast, should be used. The bowels should not by any means be neglected; by keeping them moderately open, we remove irritation; for this purpose, the neutral salts, as Sulphate of magnesia, or tartrate of potash & soda, may be preferred. When the thirst is great, lemonade, or the neutral mixture (i.e. Carb. potassæ combined with lemon juice & sweetened water) will be found useful; the last named remedy will also be serviceable, by producing a gentle diaphoresis. Should the eruption be slow in appearing, or should it "strike in", the symptoms are much aggravated, & call for immediate attention. The utility of the warm bath & of sinapisms to the heart & extremities is generally admitted; but we find some discre-

pance as to the nature of the internal means, in this case. Very many practitioners recommending Wine-whey, Camphor, Ether, Ammonia, & warm drinks; while some of our most intelligent physicians condemn the internal use of Stimulants, & advise Cool drinks & demulcents. The use of Stimulants internally, in such cases, has certainly the sanction of Ages; but when we remember the maxim of the Coan Sage "ubi irritatio ibi affluxus," we are induced to believe, that irritation of the internal surfaces would rather counteract, than aid us in bringing the eruption to the external surface. It becomes not a tyro to decide, between those who have grown gray in the practice; yet the treatment of the latter Physicians appearing the most plausible, I am induced to give it the preference.
To relieve the cough, Opiates are usually recommended, but are improper so long as symptoms of inflammation continue, during which, most advantage

will be derived from demulcent drinks, as Barley water, flaxseed tea, thin solution of gum arabic, &c; but the inflammatory symptoms having subsided, the various Cough mixtures may be given; that commonly called "Brown mixture" is generally preferred. Typhoid symptoms appearing, the treatment is the same as for the retrocession of the eruption; V.S. may be required, but should not be used with the same freedom as in the inflammatory state; where phlebotomy is inadmissible, the application of Cups or leeches to the Epigastric region, succeeded by a blister, has been found eminently useful; Neutral Salts & cool drinks, are also necessary.

One of the most frequent & most distressing sequelæ of Rubeola, is diarrhœa, for the relief of which, repeated small bleedings are the best remedy. When hoarseness continues, after the febrile symptoms have abated, a few leeches or cups over the heart, then a blister to the same

part, will generally afford relief. To guard against the consequent pneumonic affection, by no means unusual or unimportant, nothing is more likely to answer, than the application of a blister over the chest, when the disease begins to decrease in violence; this plan is recommended with confidence, being advised by one of our most valued practitioners.